NOAA WEA	ATHER RADIO BROAD	CASTS
STATION	FREQUENCY	BROADCAST TIMES
WXM-65	162.525 MHz	Continuously, 24 hrs a day
WXM-58	162.40 MHz	Continuously, 24 hrs a day
KIH-26	162.40 MHz	Continuously, 24 hrs a day
WWF-86	162.50 MHz	Continuously, 24 hrs a day
WXK-83	162.475 MHz	Continuously, 24 hrs a day
WWF-69	162.425 MHz	Continuously, 24 hrs a day
WXJ-60	162.475 MHz	Continuously, 24 hrs a day
KHB-39	162.55 MHz	Continuously, 24 hrs a day
WWF-38	162.40 MHz	Continuously, 24 hrs a day
	162.45 MHz	Continuously, 24 hrs a day
	162.55 MHz	Continuously, 24 hrs a day
KHB-34	162.55 MHz	Continuously, 24 hrs a day
WWF-85	162.525 MHz	Continuously, 24 hrs a day
KIH-63	162.475 MHz	Continuously, 24 hrs a day
KGG-67	162.55 MHz	Continuously, 24 hrs a day
		Continuously, 24 hrs a day
		Continuously, 24 hrs a day
		Continuously, 24 hrs a day
WXJ-95		Continuously, 24 hrs a day
KIH-24		Continuously, 24 hrs a day
		Continuously, 24 hrs a day
		Continuously, 24 hrs a day
	162.40 MHz	Continuously, 24 hrs a day
		Continuously, 24 hrs a day
KEC-50	162.475 MHz	Continuously, 24 hrs a day
	STATION WXM-65 WXM-58 KIH-26 WXF-86 WXK-83 WWF-69 WXJ-60 KHB-39 WWF-38 WWG-30 WXJ-70 KHB-34 WWF-85 KIH-63 KGG-67 WWF-88 KEC-85 WXK-38A WXJ-95	WXM-65 162.525 MHz WXM-58 162.40 MHz KIH-26 162.40 MHz WWF-86 162.50 MHz WXK-83 162.475 MHz WXK-69 162.475 MHz WXK-69 162.475 MHz WWF-38 162.40 MHz WWG-30 162.45 MHz WWG-30 162.55 MHz WWG-85 162.55 MHz WWF-85 162.40 MHz WWK-88 162.40 MHz WXK-38A 162.50 MHz WXK-38A 162.50 MHz WXK-38A 162.50 MHz WXK-95 162.40 MHz KIH-24 162.40 MHz KIH-24 162.40 MHz KIH-24 162.40 MHz KIH-24 162.40 MHz WWG-60 162.45 MHz WWG-60 162.45 MHz WWG-69 162.40 MHz WXK-75 162.40 MHz

These VHF-FM radio stations, locations shown on the map, are managed by the National Weather Service. Broadcast tapes are updated hourly and amended as required. Contents of the broadcast vary, but contain the following types of general information.

- 1. Special bulletins and statements concerning hurricanes or other severe weather.
- 2. Forecasts and warnings for nearby coastal waters.
- 3. Forecasts for the local area.
- 4. Descriptions of weather patterns affecting the southeastern part of the country.
- 5. Short Term Forecasts.

#Single sideband, suppressed carrier.

6. Selected weather observations

STATION NOK NMA-10	FREQUENCY (kHz) VHF CH No. ~Ch. 22A °#2670	BROADCAST TIMES (UTC) 1200, 2200
NMA-10	°#2670	0/00 1000
		0620, 1820
	~Ch. 22A	1215, 2215
NCF	°#2670	0350, 1550
VPN-2	2558	
NMA-21	°#2670	0320, 1420
	~Ch. 22A	1300, 2300
ly contain offshore fo broadcast upon recei	recasts. ipt.	
	VPN-2 NMA-21 s normally contain of y contain offshore for oradicast upon receivement on 2182 kHz	VPN-2 2558 NMA-21 °#2670

OIT (HER BROADCASTS FOR ATLA	
CITY	STATION	CARRIER FREQUENCY (kHz)	BROADCAST TIMES (UTC)
Portsmouth, VA	NMN	4426.0	0330, 0500, 0930
(USCG)		6501.0	0330, 0500, 0930, 1130, 1600 2200, 2330
		8764.0	0330, 0500, 0930, 1130, 1600 1730, 2200, 2330
		13089.0	1130, 1600, 1730, 2200, 2330
		17314.0	1730

SCHEDULE OF MARINE PRODUCTS FOR RADIO FACSIMILIE REVISED 21 OCT 1997

THE TROPICAL PREDICTION CENTER IN MIAMI, FLORIDA PROVIDES MARINE INFORMATION FOR THE GULF OF MEXICO, THE CARIBBEAN SEA AND THE TROPICAL ATLANTIC OCEAN. PRODUCTS INCLUDE: HIGH SEAS FORECASTS (12 - HOURLY WITH 6 - HOURLY AMENDMENTS), VARIOUS ANALYSES AND FORECASTS OF WINDS, SEAS, TROPICAL WEATHER SYSTEMS, FRONTS, AND GOES - 8 SATELLITE IMAGERY (AVAILABLE 6 - HOURLY).

THESE AND OTHER TROPICAL PREDICTION CENTER/NATIONAL HURRICANE CENTER PRODUCTS ARE ALSO AVAILABLE VIA INTERNET ADDRESS: http://www.nhc.noaa.gov/

TRANSMISSION			TRANSMISSION		
TIMES (UTC)	PROD	UCT DESCRIPTION	TIMES (UTC)	PRODU	JCT DESCRIPTION
0000	1800	UTC TROPICAL SURFACE ANALYSIS/24 HR FORECAST	1200	0600	UTC TROPICAL SURFACE ANALYSIS/24 HR FORECAST
0030	00/12	UTC GULF WIND/WAVE FORECAST	1230	12/00	UTC GULF WIND/WAVE FORECAST
0050	2200	UTC HIGH SEAS FORECAST	1250	1000	UTC HIGH SEAS FORECAST
0115	00/12	UTC WIND/WAVE FORECAST	1315	12/00	UTC WIND/WAVE FORECAST
0135	1800	UTC U.S. SURFACE ANALYSIS	1335	0600	UTC U.S. SURFACE ANALYSIS
0150	2345	UTC GOES – 8 TROP SAT IMAGE	1350	1145	UTC GOES - 8 TROP SAT IMAGE
0205	##	REQUEST FOR COMMENTS	1405	##	PRODUCT NOTICE BULLETIN
0600	0000	UTC TROPICAL SURFACE ANALYSIS/24 HR FORECAST	1800	1200	UTC TROPICAL SURFACE ANALYSIS/24 HR FORECAST
0630	##	RADIOFAX PRODUCT SCHEDULE	1830	##	RADIOFAX PRODUCT SCHEDULE
0650	0400	UTC HIGH SEAS FORECAST	1850	1600	UTC HIGH SEAS FORECAST
0715	06/18	UTC WIND/WAVE FORECAST	1915	18/06	UTC WIND/WAVE FORECAST
0735	0000	UTC U.S. SURFACE ANALYSIS	1935	1200	UTC U.S. SURFACE ANALYSIS
0750	0545	UTC GOES - 8 TROP SAT IMAGE	1950	1745	UTC GOES - 8 TROP SAT IMAGE
0805	##	REBROADCAST OF 0030 UTC WIND/WAVE FORECAST	2005	##	REBROADCAST OF 0030 UTC WIND/WAVE FORECAST

SIMULTANEOUS BROADCAST FREQUENCIES FROM UNITED STATES COAST GUARD STATION (NMG) NEW ORLEANS, LOUISIANA ARE: 4317.9 kHz

8503.9 kHz 12789.9 kHz

SELECT A CARRIER FREQUENCY 1.9 kHz BELOW THOSE LISTED WHEN USING A SINGLE SIDEBAND RADIO IN USB MODE TO RECEIVE THESE BROADCASTS.

ADDITIONAL INFORMATION CAN BE OBTAINED BY CALLING 305-229-4470.

PLEASE ADDRESS COMMENTS TO: NATIONAL WEATHER SERVICE/NOAA

1325 EAST-WEST HIGHWAY SILVER SPRING, MD 20910

ATTN: TIM RUION AT 301-713-1677 (EXT. 128) FAX: 301-713-1598

E-MAIL: Timothy.Rulon@noaa.gov or marine.weather@noaa.gov

RADIO WWV/WWVH STORM INFORMATION BROADCASTS

HIGH SEAS STORM INFORMATION for the North Atlantic and North Pacific is provided mariners through a cooperative program of two Department of Commerce agencies: the National Weather Service of the National Oceanic and Atmospheric Administration and the National Institute of Standards and Technology. Bulletins are compiled by the National Weather Service and broadcast every hour by the National Institute of Standards and Technology's Frequency and Time Broadcast Services Radio Stations - WWV, Fort Collins, Colorado and WWVH, Kauai, Hawaii. These are the stations that sailors and others listen to for daily time checks.

WWW (FORT COLLINS, CO) FREQENCIES: 2.5, 5, 10, 15, 20 MHz

The weather broadcast is in 45-second segments separated by a 15-second interval.

TIMES OF BROADCAST BROADCAST AREA 8 minutes past the hou Atlantic High Seas Warning 9 minutes past the hour Atlantic High Seas Warning

DIAL-A-BUOY

Mariners can obtain the latest coastal and offshore weather observations through a new telephone service called Dial-A-Buoy. This service provides wind and wave measurements taken within the last hour at stations located in coastal waters around the United States and in the Great Lakes. To access Dial-A-Bouy, dial 228/688-1948 using a touch tone or cellular phone. Enter the five-digit station identifier when prompted. The Dial-A-Bouy menu tree has a selection for the caller to receive a

map of bouy station identifiers via return call fax. Station identifiers can also be obtained from the

following web site: http://seaboard.ndbc.noaa.gov.

WEATHER RULES FOR SAFE BOATING

Before settina out:

Obtain the latest available weather forecast for the boating area. Where they can be received, the NOAA Weather Radio continuous broadcasts (VHF-FM) are the best way to keep informed of the expected weather and sea conditions. If you hear on the radio that warnings are in effect, don't venture out on the water unless you are confident your boat can be navigated safely under forecast conditions of wind and sea.

While afloat:

- 1. Keep a life jacket on and keep a weather eye out for: the approach of dark, threatening clouds, which may foretell a squall or thunderstorm; any steady increase in wind or sea; any increase in wind velocity opposite in direction to a strong tidal current. A dangerous rip tide condition may form steep waves capable of broaching a boat.
- 2. Check radio weather broadcasts for latest forecasts and warnings. 3. Heavy static on your AM radio may be an indication of nearby
- thunderstorm activity. 4. If a thunderstorm catches you while afloat, you should remember that not only gusty winds but also lightning poses a threat to safety. - stay below deck if possible.
- keep away from metal objects that are not grounded to the boat's protection system
- don't touch more than one arounded object at the same time (or you may become a shortcut for electrical surges passing through the protection system).

from:

- Prepare for rough sea conditions.

OTHER MARINE WEATHER SERVICES CHARTS AVAILABLE

MSC-1	Eastport, ME to Montauk Point, NY	MSC-8	Mexican Border to Point Conception, CA	Copies of these charts are available for \$1.25 each fr
MSC-2	Montauk Point, NY to Manasquan, NJ	MSC-9	Point Conception, CA to Point St. George, CA	National Ocean Service
MSC-3	Manasquan, NJ to Cape Hatteras, NC	MSC-10	Point St. George, CA to Canadian Border	Distribution Division (N/ACC3)
MSC-4	Cape Hatteras, NC to Sayannah, GA	MSC-11/12	Great Lakes	6501 Lafayette Avenue
MSC-5	Savannah, GA to Apalachicola, FL	MSC-13	Hawaiian Waters	Riverdale, MD 20737-1199
MSC-6	Apalachicola, FL to Morgan City, LA	MSC-14	Puerto Rico and Virgin Islands	Telephone: 1-(800)-638-8972
MSC-7	Morgan City, LA to Brownsville, TX	MSC-15	Alaskan Waters	Nautical charts for navigation purposes for these
		MSC-16	Guam and the Northern Mariana Islands	coastal areas are available from local marinas,
All of the	se charts can be viewed at the following web site	: http://www	nws.noaa.gov/om/marine/pub.htm	marine supply stores and the above address.

INTERNET ADDRESSES NWS Tampa, FL http://www.srh.noaa.gov/tbw NWS Tallahassee, FL http://www.nws.fsu.edu/ National Weather Service Home Page http://www.nws.noaa.gov National Data Buoy Center http://seaboard.ndbc.noaa.gov U.S. Coast Guard Navigation Center http://www.navcen.uscg.mil Marine Dissemination Information http://www.nws.noaa.gov/om/marine/home.htm NWS Charleston, SC http://wchs.csc.noaa.gov NWS Southern Region Headquarters http://www.srh.noaa.gov NWS Jacksonville, FL http://www.nwsjax.noaa.gov/mainpage.html NWS Melboume, FL http://www.srh.noaa.gov/mlb NWS Miami, FL http://www.srh.noaa.gov/mia NWS Key West, FL http://www.srh.noaa.gov/eyw

NWS PRODUCTS AVAILABLE THROUGH E-MAIL (FTPMAIL)

National Weather Service radiofax charts broadcast by the U.S. Coast Guard from Boston, New Orleans and Pt. Reyes, California are available via e-mail. Marine text products are also available. The FTPMAIL server is intended to allow Internet access for mariners and other users who do not have direct access to the World Wide Web but who are equipped with an e-mail system. Turnaround is generally in under three hours, however, performance may vary widely and receipt cannot be guaranteed. To get started in using the NWS FTPMAIL service, follow these simple directions to obtain the FTPMAIL "help" file (6 KBytes).

Address: ftpmail@weather.noaa.gov Subject: (not required)

Direct any questions to 301-713-1677, extension 128

or 301-713-0882, extension 122.

DETERMINATION OF WIND SPEED BY SEA CONDITION WINDFORCE PROBABLE WAYE WAYE						
	DEOCKII IIVE	SEA CONDITIONS	(BEAUFORT)	HEIGHT (FT		
0-1	Calm	Sea smooth and mirror-like.	0	-		
2-3	Light air	Scale-like ripples, without foam crests.	1	0.25		
4-6	Light breeze	Small, short wavelets; crests have a glassy appearance and do not break.	2	0.50		
<i>7</i> -10	Gentle breeze	Large wavelets; some crests begin to break; foam of glassy appearance. Occasional white foam crests.	3	2		
11-16	Moderate breeze	Small waves, becoming longer; fairly frequent white foam crests.	4	4		
17-21	Fresh breeze	Moderate waves, taking a more pronounced long form; many white foam crests; there may be some spray.	5	6		
22-27	Strong breeze	Large waves begin to form; white foam crests are more extensive everywhere; there may be some spray.	6	10		
28-33	Near gale	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind; spindrift begins.	7	14		
34-40	Gale	Moderately high waves of greater length; edges of crests break into spindrift; foam is blown in well— marked streaks along the direction of the wind.	8	18		
41-47	Strong gale	High waves; dense streaks of foam along the direction of the wind; crests of waves begin to topple, tumble, and roll over; spray may reduce visibility.	9	23		
48-55	Storm	Very high waves with long overhanging crests. The resulting foam in great patches is blown in dense white streaks along the direction of the wind. On the whole, the surface of the sea is white in appearance. The tumbling of the sea becomes heavy and shocklike. Visibility is reduced.	10	29		
56-63	Violent storm	Exceptionally high waves that may obscure small and medium-sized ships. The sea is completely covered with long white patches of foam lying along the direction of the wind. Everywhere the edges of the wave crests are blown into froth. Visibility reduced.	11	37		
64-71	Hurricane	The air is filled with foam and spray. Sea completely white with driving spray; visibility very much reduced.	12	4 5		